Government of Madras

Public ~~Home~~ (RDP VI) (1955) Department.

25,002—11-8-53.

Memorandum No. 1125 RDP VI/55-1

Dated 15-2-1955

~~Passport Order No.~~
~~Dated~~

D.Dis. 2016/55.

FEB 1955

Proceedings of the Collector of South Kanara, Mangalore, dated:2-2-55.
Sri A. Kunhamed, B.A.,

SUB:- COMMUNITY PROJECT:- South Kanara, Block III - Communications - construction of a bridge on Bailur - Yelapadi Road - Estimate - Sanctioned.

READ:-From Project Executive Officer, South Kanara, Ref.2016/53.B, dated:15-1-55.

The Collector of South Kanara hereby sanctions the incuring of an expenditure not exceeding Rs.(8,000/-), eight thousand only being the estimated cost of constructing a bridge on the Bailur Yelapadi Road being formed by the villagers at an approximate cost of Rs.4,000/- besides a contribution of Rs.2900/- forwarded by the Panchayat Board, Hrigan, in Karka Taluk.

2/-This sanction is counted against item No.9, in Block No.III, under Katcha roads in the Revised ~~Small~~ Rural Programme under the category of "Communications". Community Project II

3/-The expenditure is debitable to "63 B, Community Projects, - Communication - works".

4/-The Project Executive Officer, South Kanara is requested to get the work executed expeditiously according to the estimate returned herewith aproved and submit the completion report in due course.

~~Order~~.

4-2-55.
For Collector.

To
The Project Executive Officer, South Kanara with one copy of theestimate duly sanctioned.
Copy to:- The Director of Community Development, Madras (2 copies) with one copy of the sanctioned estimate.

Copy to:- The Secretary, Community Project Administration, Rastrpathi Bhavn, New Delhi.
Copy to:- The Accountant General, Madras.
Copy to:- T.D.C., South Kanara
Copy to:- The Secretary to the Commissioner of C.P., The Board of Revenue, (Food Production), Chepauk, Madras 5.

Copy to:- Assistant Project Officer, Karkal.
Copy to:- M3.
A.N./3.2.55.

Report to accompany the estimate for constructing a bridge on Bailur Yerlapadi Road. Est R. 10000/-

The site of the bridge is about 20'-0" downstream from the centre line of approach road. This site was selected by the Divisional Engineer (H) Mayuram during his inspection of the bridge site on 6-10-1953. At site boulders are seen on the surface and the geology of the site indicate the possibility of meeting sound rock 4'-0" or 5'-0" below bed. The abutments and piers will be founded on rock after breaking the same and laying a levelling course of cement concrete 1:3:6. 1'-0" thick. Abutments will be of C R masonry II sort in C M 1:5. Piers and pilasters and parapets will be of C R masonry I sort in C M 1:5. Bed block with C C 1:2:4 mix using 3/4" hard granite chips and 1'-0" thick will be laid over abutments and piers to carry the deck slab. The deck slab will be of R.C. 1:2:4, 0'-14" thick

using 3/4" hard granite chips, designed for IRC B class loading. The wearing coat will be of C C 1:1½:3 using 3" thick using 66⅔% of 1" nilg and 33⅓% of ½" nilg.

Provisions have been made for revetments, approach road, blasting boulders, shoring and bailing water and construction of temporary shed to store materials etc.

The bridge will be of 2 spans of 15'-0" each with 12'-0" roadway. The land required for the formation of approach road on the right bank will be acquired free from owner.

The whole work will be carried out as per MDSS and other relevant circulars.

(Sd) G. S. Kamanathan
Asst Engineer (Civil)

(Sd) M. L. Sastian
Junior Engineer Civil

Approved.

for Divisional Engineer (H)
Community Projects
Manjeshwar.

Design

~~Waterway~~ area = 1·87 Sq mile

Average bed level = ~~90·54~~ 90·05

E. F.L = 95·04

∴ Depth of flow = ~~4·54~~ 5 ft

Max flood discharge = $CM^{2/3}$

$= \frac{1500}{1000} \times 1.87^{2/3} = 2277$ cusecs

Human waste may required assuming a velocity of 60 ft per second having rocky bed,

$= \frac{2277}{75} = 30$ ft 45° & 45°

~~Hence~~ Provide 5 x 10 Nos of R.C.C. Hollow slab with 30 ft clear span between abutment & pier with 2 feet of 75 lbs earth pressure.

(2) Afflux $= \frac{v^2}{2g}\left(1.1\frac{L^2}{l^2} - 1\right)$ where v = normal velocity of flow in channel.

L = normal width of channel

l = net width provided through the bridge

$= \frac{10 \times 10}{64}\left(1.1 \times \frac{32 \times 32}{30 \times 30} - 1\right)$

$= 0.39$ ft

~~The~~ Depth of flow including afflux = 5·39 ft

Hence depth of 7' provided is safe.

(3) Pressure at pier bottom

Impact factor = $\frac{15}{20+L} = \frac{15}{20+15} = 0.43$

Live load on pier = $1.43 \times 25000 \times 2 = 71500$

weight of R.C Slab = $17.5' \times 13.5' \times 1.5' \times 150 = 53156$

Add for hand rails, kerbs, railings etc. L.S. 689 / 700

weight of pier — Top portion $1 \times 16.6 \times 2.6 \times 5 \times 140 = 28875$

" Bottom portion $1 \times 17 \times 3 \times 2 \times 140 = 14280$

Total 168530 or 75 Tons

Bearing area = $17 \times 3 = 51$ Sq ft

∴ Pressure = $\frac{75}{51} = 1.5$ Tons per Sq ft.

Ordinary rubble in cement mortar can take 8 Tons load per Sq ft. Hence safe.

Foundation : Abutments & pier will be founded on rock after benching & laying a 1-0" bedding course of concrete.

Abutments Top = 2'6"

~~Bottom = Depth + 1 = 0.4H~~

Bottom width at sill = $0.4H + 1 = 0.4 \times 8.75 + 1$

$= 4.5$

Length provided = 44'

R.C. [illegible]

A Rockwin of 17·9" w 18" [illegible] for clear span of 15'-0"
Chief Engineers (Highways) Ref C.E(H) No. 18/47
for I.R.C. Standard, class A loading.
R.C. Land rails, joists & curb as per
plan No 45/50 / S.G B.P. No. 10 S.E(H)
memo No 2287/49 dt 19-9-49.

20/10/52.

9/11

Divisional Engineer (4)
Communications Projects
Mangalore.

FOR MYSORE STATE

Public (~~R&T~~ XI) (1955) Department.

(Misc.) SERIES.

Passed
9
1 Supdt

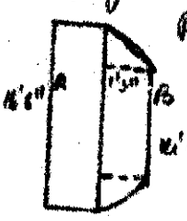
G.O. No. 1869.

Dated 11-6-55.

[Despatch Abstract.]

Q. Construction a bridge on Bantur-Yerlapadi Road.

	Details of works	Number	Measurement in feet			Area or Content	
			Length	Breadth	Depth		
I	Earth work in hard gravelly soil for foundation.						
II	Cement Concrete 1:3:6 mix using 1½" size hard granite jelly B.S.S. Size for foundation						
	Abutments	2	17'6"	6'6"	1'-0"	228	
	Wings	2×2	3'0"	6'6"	1'0"	78	
	Piers	1	17"0"	3'6"	1"0"	60	366 or 370 cft
III	C.R. Masonry II sort in CM 1:5 mix including Cost and Conveyance of all materials to site						
	Right Abutment						
	Portion A 88.00 to 97.00	1	16"6"	$\frac{1'3"+3'6"}{2}$	9'60"	353	
	Portion B	1	14'0"	$\frac{1'3"+2'0"}{2}$	9'0"	205	
	Quadrants	2	$\frac{22}{7}$	$\frac{(1'3")^2}{4}$	9'0"	32	
	Wings 88.00 to 97.00	2	$\frac{3'0"+5'6"}{2}$	$\frac{2'0"+3'6"}{2}$	9'0"	270	
	Left Abutment						
	Portion 87.00 to 97.00	1	16"6"	$\frac{1'3"+3'6"}{2}$	10'0"	382	
	Portion B	1	14'0"	$\frac{1'3"+2'6"}{2}$	10'0"	228	
	Quadrants	2	$\frac{22}{7}$	$\frac{(1'3")^2}{4}$	10'0"	35	
	Wings 87.00 to 97.00	2	$\frac{3'0"+5'6"}{2}$	$\frac{2'0"+5'6"}{2}$	10'0"	300	
	Wings 97 to 98.42	2×2	5'0"	1'6"	1.42'	43	
	Backing course	2	16'6"	1'3"	1'2"	48	
	Deduct for bed block	2	14'0"	1'3"	1'0"	35	
						1861	1900 cft



[P.T.O.]

	Details of Works.	No.	Measurement in feet			Area	
			Length	Breadth	Depth		
IV	Coursed Rubble Masonry 1 Sort in C.M. 1:5 including Cost and Conveyance of all materials to Site						
	Piers 87.00 to 92.00	1	13'6"	2'6"	5'0"	169	
	Cutwaters	2	$\frac{22}{7}$	$\frac{(2'6")^2}{4}$	5'0"	49	
	92.00 to 96.00	1	13'6"	2'0"	4'0"	108	
	Pilasters	4×2	1'6"	1'6"	3'0"	54	
	Parapets	2×2	3'0"	1'3"	2'6"	38	443 or 450 cft
V	C.C. 1:2:4 mix using 3/4" hard granite jelly including cost and conveyance materials to site for bed block						
	Abutments	2	14'0"	1'3"	1'3"	35	
	Piers	1	13'6"	2'0"	1'0"	27	
	Coping over pilasters	2×4	1'9"	1'9"	0'4"	8	60 or 75 cft
VI	(a) R.C. 1:2:4 using 3/4" hard granite jelly including materials for deck Slab	1	34'6"	13'6"	1'2"	543	
	kerbs	2	34'6"	0'9"	0'11"	47	590 cft
	(b) R.C. posts	2×8	3'6"	0'5"	0'7"	13.6	
	R.C. hand rails	2×2	34'6"	0'5"	0'6"	28.8	42.4 or 43 cft
VII	C.C. 1:1½:3 using 66⅔% of 1" jelly and 33⅓% of ½" jelly including cost and conveyance of all materials to site for wearing coat	1	37'0"	12'0"	0'3"	111 cft	

	Details of work	No.	Measurement in feet Length	Breadth	Depth	Area	
VIII	Rough stone dry packing for Revetment circular portion						
	Tee walls	4	× 22/7	× 10×1/4	× 2'0"	×2'0" =	126
	Revetment	4	× 5'0"	× 1'0"	× 12'0"	=	240
	Approach road towards upstream left abutment	1	80'0"	2'0"	2'0"	320	
	Right abutment	1	20'0"	2'0"	2'0"	80	
	Downstream side Right & left abutment	2	20'0"	2'0"	2'0"	160	
	Revetment upstream side left abutment	1	86 0"	1'0"	8'0"	640	
	Right abutment	1	20'0"	1'0"	9'0"	180	
	Downstream side Right & left abutment	2	20'0"	1'0"	8'0"	320	2066 or 2100 cft
IX	Earth work in hard gravelly soil with initial lead & lift for approach road	1	80'0"	20'+36'/2	9'0"	2088	
	Right side approach road.	1	20'0"	20+36/2	8'0"	1680	
	Extra for the remaining portion					2640	28000 cft
X	Contingencies Such as extra lead & lift for earth work, baling out water during excavation, provision of planks & round bars, construction of temporary sheds for storing materials etc.						
XI	Petty Supervision charges						

Taken up and
(Sd) G. S. Ramanathan
Asst Engineer
Contract

(Sd) M. L. Sahian
Junior Engineer
Contract

Approved
K/11
Divisional Engineer
Construction Contract

Constructing a Bridge over Bailur - Yerlapadi Road

11)

P.W.D. V-13—67,416—20-6-52.

ESTIMATE FORM—Abstract.

Item number. (1)	Quantity. (2)	Description of work. (3)	Rate. (4)	Per. (5)	Amount. (6)	Total. (7)
			RS.		RS.	RS.
1	L.S.	Earth work open excavation upto rock for foundation of abutments and piers in all kinds except rock requiring blasting	L.S.		200/-	
2.	400	Concrete hand broken Stone 1½" Bgge in CM 1:3:6	125-0-0	100 cft	500/-	
3.	1900 cft	Coursed Rubble Masonry II sort in CM 1:5:4	100-0-0	100 cft	1900/-	
4	775 cft	Concrete hand broken Stone 3½" bgge in CM 1:2:4	175-0-0	100 cft	131/-	
5.	570 cft	Reinforced Cement Concrete 1:2:4 with 3½" jelly for deck Slab	4-8-0	1 cft	2655/-	
6	450 cft	Coursed rubble Masonry I sort in CM 1:5	120-0-0		540/-	
7	43 cft	Reinforced Cement Concrete 1:2:4 with 3½" jelly for hand posts, rails	11-0-0		473/-	
8	111 cft	Cement Concrete 1:1½:3 using ½ cub 66⅔% of 1" metal & 33⅓% of ½" granite metal for wearing coat	220-0-0	100 cft	244/-	
9	2100 cft	Rough Stone dry packing for aprons and Abutment	35-0-0	100 cft	735/-	
10	28000	Earth work excavating in hard gravelly soil, roads with initial lead & lift	21-6-0	100 cft	5991/-	
11	L.S.	Contingencies Such as extra lead and lift for earth work blasting boulders providing dewatering arrangements required construction of temporary Shed, storerooms			1923/-	
12	L.S.	Petty Supervision charges			300/-	
		Total				10000

Rupees ten thousand only.

Countersigned.
(Sd) G. S. Ramachandra
Asst Engineer CP
Kanakal (R.T.O)

(Sd) M. A. Sultan
Junior Engineer CP
Kanakal.

12 Enclosure to D Dis 2288/55 dt 2.2.55 to D.C.D.

ESTIMATE FORM—Abstract.

Item number. (1)	Quantity. (2)	Description of work. (3)	Rate. (4)	Per. (5)	Amount (6)	Total. (7)
			RS.		RS.	RS.

Technical Sanction accorded for Rs 10,000/-
(Rupees Ten Thousand only) in DR No 122 P/54-55

Sd/- Illegible
for
11/11 Divisional Engineer (H)
Community Project
Manjalur

Sanctioned for Rs 10000/=
(Ten thousand only)
Community Project fund to be limited to Rs 8000/=
(Eight thousand) only.

Sd/-
Collector, S. Kanara
R/31/11 8/11/55

Pub (RDP VI) 13

above

Memo No. 1125 Pub (RDP VI) 55-1 dt. 15-2-55.

Sub:- Cls - S. Kanara Area - Block III - Communications. Construction of a bridge on Bailur-Yarlapadi road - Sanctioning by the Collector

Ref:- From the Collector of S. Kanara D.Dis 2288/ dt. 2-2-55

The Collector of S. Kanara, in his proceedings cited, has sanctioned an expenditure of Rs 8000/-, States to be his estimated cost of the above mentioned work. But it is seen from the Copy of the estimate furnished by him that the estimated cost is Rs 10,000/- It has also been stated that a sum of Rs 2000/- has been forwarded by the Panchayat board of Hriyan in Karkal Taluk as their Contribution

It is presumed that the above Contribution is towards the cost of the bridge and that this has been remitted into a Govt treasury by the Panchayat Board. If the presumption is Correct, the expenditure to be sanctioned should be for the gross cost of the work, viz Rs 10,000/- so as to enable payment being made to the executor of the work.

The Collector of S. Kanara is requested to issue necessary Amendments to the proceedings cited

11-2 DT.

CENTRAL DESPATCH BRANCH
Received by post/hand
9/2/55
Despatcher's Initials

To
The Collector of S. Kanara
To The PEO. Mangalore (Public Relations Officer) copy
SF-III

4 -

DN.

The Copy of the proceedings of the Collector of Kanara at p/cf may be perused. As it is not correctly worded, the draft above may be issued, so as to avoid subsequent difficulties in execution of the work

Through Pub (RDP VIII)
11/2/55 11-2-55

11.2.55

14/2/55

11/2/55

(Issued as Memo NO. 1125 Pub (RDP VII)/55-1 dated 15/2/1955.)

Ref.C.No.5124/55(M3)

S.K.Collector's Office,
Mangalore,dated 16.4.55.

15

From

Sri A.Kunhamed, B.A.,
Collector of South Kanara.

The Addl.Secretary to Government,
Public(R.D.P.)Department,Fort St.George,
Madras

COMMUNITY PROJECT - South Kanara Area- Block III- Communications- construction of a bridge on Bailur Yellapadi road- Amendment - issue of- Report -Submitted.

-:o:-

Ref:
1) This Office D.Dis.2288/55 dated 2.2.55.
2) Government Memo.No.1125 R.D.P.VI/55-1 dated 15.2.55.
3) do No.1159 Pub.(R.D.P.VIII)/55-1 dated 4.4.55.

-:o:-

The sum of Rs.8000/- Eight thousand sanctioned for Community Project funds in this office proceedings cited first, is the portion of the total estimated cost of Rs.10,000/- for the construction of the bridge work, the balance of Rs.2000/- being met by the Panchyat Board,Hargan in respect of said bridge work itself.

2. The Project Exectutive Officer,South Kanara has reported that the Asst.Project Officer,Karkal has been directed to arrange for the remittance of Rs.2000/- being the contribution of the amount of the Panchayat,Board, Hargan towards the construction of the bridge and his report of compliance is awaited.

3. A copy of the revised proceedings in lieu of this

office proceedings cited first is enclosed. 1/2

Yours faithfully,

12- 4.55.

For Collector.

KV/18.4.

9/18.4.55

Public (RDPI) Dept

Memo. No. 1537/M-1. Dt 27-9-M

Cls - S.K - Agrl. equipments.
Supply of addl. equipments.

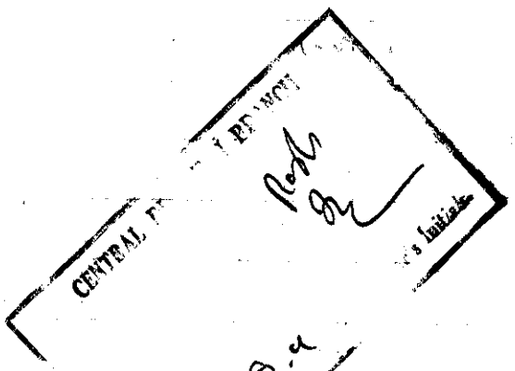
Ref: From the PEO, Mangalore, CM
2933/52-c. dt. 25-6-52.

The PEO, Mangalore is requested to send a copy of the reference cited as the same has not been received by Govt.

27/9/M.

27/9/52

PTO,



The PEO, Mangalore.

Pub (RDP VI) Deptt.

Memo. NO. 3178/55-1 Dt. 2-5-1955.

Sub:- C.Ps- S.K. area - Block III - Communications - Construction of a bridge on Bailur-Yarlapadi road - Sanctioned by the Collector.

Ref:- From the Collector of S.K., C.No. 5124/55 (M3), Dt. 16/4/55.

The Collector of S. K. is requested to furnish a copy of the revised proceedings issued by him as it was not received along with the letter cited.

2/5/55

To the Coll. of S.K.,
Mangalore.

[RD. 28/5/5-5]

NOTE:- The proceedings (revised) said to have been sent with the letter in the Ref., has not been received. Hence, the above draft memo above is for approval.

Pub. (RDP VI)

2/5/55

ACCOUNTS AND SPECIAL OFFICER
2786-VII
- MAY 1955
3586
PUBLIC DEPARTMENT

5 17

2786-VII P.No.514/55.M3

S.K.Collector's Office,
Madurai, dated 7.5.55.

From
G.A.[illegible] Rao, I.A.S.,
Collector of South Kanara.
Mangalore.

To
The Addl.Secretary to Government,
Public (R.D.P./Department,
Fort St.George, Madras.

Sir,

Sub:-VIII PROJECTS--South Kanara--Block III--Communications--construction of a bridge on Bailur-Yelaguli Road--Sanctioned by the Collector--Irte copy--enclosed.

--:o:--

Ref: 1. This office Ref.514/55.M3 dated 10.4.55 along with
2. " Proceedings "
3. Govt.Memo No.2178/55.1. dated 2.5.55.

--:o:--

A true copy of this office Proceedings cited second sent along with this office letter cited first is submitted herewith.

Pub(RDP VII)

Pub(RDP VII)

Pub(RDP VII)NO.NO.
2786/55-1 dt 12.5.55

12/5/55

Yours faithfully,

7.5.55.

For Collector.

Encl.

W/T 7.5.55

Copy of Ref:C.No.5134/55. (proceedings) Dated 15-4-55.

Community Project-South Kanara Block III - communications Construction of a bridge on Sulia - Kelapadi road - estimate - Sanctioned - Revised proceedings issued.--

Read:(1)Lr. P.A.C's Ref:2616/55.A.Dated 15-1-55.-
2. This Office D.Dis.2238/55.Dated 2-2-55.
3. Government Memo.125.R.D.P.VI. /55.1.dated 15-3-55.-

In modification of this of the proceedings cited second, the Collector, South Kanara, hereby sanctions, the incurring of an expenditure not exceeding Rs.8,000/- (Rs.Eight thousand only) from out of the C.P.funds being the portion of the total estimated cost of Rs.(10,000) ten thousand only for the construction of a bridge on the Sulia-Kelapady road which is being formed by the villagers at an approximate cost of Rs.4000/- The balance of Rs.2000/-(two thousand only) for this bridge ~~the~~ work will be met from the contribution by the Panchayat Board Hiriya in Karkal Taluk.

2. This sanction is counted against item No. in block No.III under Katcha road in the revised Overall Programme under the category of "communications"

3. The expenditure is debitable to "68-3 Community Development Projects-I-Communications- Works".

4. The Project Executive Officer South Kanara is requested to get the work executed expeditiously according to the estimate plan approved and furnish the completion report in due course.

(True copy)

7-5-55
for Collector

Pub (RDP.VI) Deptt.

Page 1-7 above may be perused.

The proceedings on p. 7 above has been issued with reg. to the memo at p 13 of (A). May be lodged and added to Memo No 1125-pub (RDP) VI/55-1, dt 10/2/55 (A)

13/5/55

13/5/55

10/5/55

Pub (RDP VI)